

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

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1. (Currently Amended) An antimicrobial concentrate composition comprising:

~~a combination of peroxyacetic acid and peroxyoctanoic acid effective for killing on the surface of a fruit or vegetable pathogenic microorganism comprising *Escherichia coli* O157:H7, *Listeria monocytogenes*, *Salmonella javiana*, or mixture thereof;~~

the combination comprising about 35 to about 45 weight-% acetic acid, about 5 to about 15 weight-% octanoic acid, about 3 to about 8 weight-% hydrogen peroxide, about 8 to about 16 weight-% peroxyacetic acid, about 1 to about 5 weight-% peroxyoctanoic acid, and about 0.1 to about 2 weight-% chelating agent;

C1 wherein the composition comprises at least about 1 part by weight of peroxyoctanoic acid for each about 5 parts of peroxyacetic acid.

2. (original) The antimicrobial concentrate composition of claim 1, comprising about 40 weight-% acetic acid, about 10 weight-% octanoic acid, about 5 weight-% hydrogen peroxide, about 12 weight-% peroxyacetic acid, about 3 weight-% peroxyoctanoic acid, and about 0.6 weight-% chelating agent.

3. (Currently Amended) An antimicrobial use composition comprising:

~~a combination of peroxyacetic acid and peroxyoctanoic acid effective for killing on the surface of a fruit or vegetable pathogenic microorganism comprising *Escherichia coli* O157:H7, *Listeria monocytogenes*, *Salmonella javiana*, or mixture thereof;~~

the combination comprising about 10 to about 150 ppm acetic acid, about 5 to about 40 ppm octanoic acid, about 4 to about 20 ppm hydrogen peroxide, about 5 to about 50 ppm peroxyacetic acid, about 2 to about 25 ppm peroxyoctanoic acid, and about 0.2 to about 2.5 ppm chelating agent;

wherein the composition comprises at least about 1 part by weight of peroxyoctanoic acid for each about 5 parts of peroxyacetic acid.

4. (Currently Amended) The antimicrobial use composition of claim 3, comprising about 133 ppm acetic acid, about 33 ppm octanoic acid, about 17 ppm hydrogen peroxide, about 40 ppm peroxyacetic acid, about ~~33~~ 10 ppm peroxyoctanoic acid, and about 2 ppm chelating agent.

5. (original) The antimicrobial use composition of claim 3, wherein an aqueous flume comprises the composition.

C1 6. (Currently Amended) An antimicrobial concentrate composition comprising:

~~a combination of peroxyacetic acid and peroxyoctanoic acid effective for killing on the surface of a fruit or vegetable pathogenic microorganism comprising *Escherichia coli* O157:H7, *Listeria monocytogenes*, *Salmonella javiana*, or mixture thereof;~~

~~the combination comprising~~ an equilibrium mixture resulting from a composition of about 50 to about 60 weight-% acetic acid, about 10 to about 20 weight-% octanoic acid, about 5 to about 15 weight-% hydrogen peroxide, and about 0.3 to about 1 weight-% chelating agent;

wherein the equilibrium mixture comprises at least about 1 part by weight of peroxyoctanoic acid for each about 5 parts of peroxyacetic acid.

7. (original) The antimicrobial concentrate composition of claim 6, comprising an equilibrium mixture resulting from a composition of about 54 weight-% acetic acid, about 14 weight-% octanoic acid, about 10 weight-% hydrogen peroxide, and about 0.6 weight-% chelating agent.

8. (Currently Amended) An antimicrobial concentrate composition comprising:

~~a combination of peroxyacetic acid and peroxyoctanoic acid effective for killing on the surface of a fruit or vegetable pathogenic microorganism comprising *Escherichia coli* O157:H7, *Listeria monocytogenes*, *Salmonella javiana*, or mixture thereof;~~

~~the combination comprising about 50 to about 60 weight-% acetic acid, about 10 to about 20 weight-% octanoic acid, about 5 to about 15 weight-% hydrogen peroxide, and about 0.3 to about 1 weight-% chelating agent;~~

~~wherein the composition comprises at least about 1 part by weight of peroxyoctanoic acid for each about 5 parts of peroxyacetic acid.~~

9. (original) The antimicrobial concentrate composition of claim 8, comprising about 54 weight-% acetic acid, about 10 weight-% hydrogen peroxide, about 0.6 weight-% chelating agent, and about 14 weight-% octanoic acid.

10-30. (canceled)

31. (Currently Amended) An aqueous flume for washing or transporting produce comprising:

~~a combination of peroxyacetic acid and peroxyoctanoic acid effective for killing on the surface of a fruit or vegetable pathogenic microorganism comprising *Escherichia coli* O157:H7, *Listeria monocytogenes*, *Salmonella javiana*, or mixture thereof;~~

~~the combination comprising about 10 to about 150 ppm acetic acid, about 5 to about 40 ppm octanoic acid, about 4 to about 20 ppm hydrogen peroxide, about 5 to about 50 ppm peroxyacetic acid, about 2 to about 25 ppm peroxyoctanoic acid, and about 0.2 to about 2.5 ppm chelating agent;~~

~~wherein the composition comprises at least about 1 part by weight of peroxyoctanoic acid for each about 5 parts of peroxyacetic acid.~~

32. (Currently Amended) The aqueous flume for washing or transporting produce of claim 31, comprising about 133 ppm acetic acid, about 33 ppm octanoic acid, about 17 ppm hydrogen peroxide, about 40 ppm peroxyacetic acid, about 23 to 10 ppm peroxyoctanoic acid, and about 2 ppm chelating agent.

33-34. (Canceled)

35. (New) The method of claim 1, wherein the combination of peroxyacetic acid and peroxyoctanoic acid is effective for killing on the surface of a fruit or vegetable pathogenic microorganism comprising *Escherichia coli* O157:H7, *Listeria monocytogenes*, *Salmonella javiana*, or mixture thereof.

36. (New) The method of claim 1, wherein the composition comprises at least about 1 part by weight of peroxyoctanoic acid for each about 4 parts of peroxyacetic acid.

37. (New) The method of claim 3, wherein the combination of peroxyacetic acid and peroxyoctanoic acid is effective for killing on the surface of a fruit or vegetable pathogenic microorganism comprising *Escherichia coli* O157:H7, *Listeria monocytogenes*, *Salmonella javiana*, or mixture thereof.

38. (New) The method of claim 3, wherein the composition comprises at least about 1 part by weight of peroxyoctanoic acid for each about 4 parts of peroxyacetic acid.

39. (New) The method of claim 6, wherein the combination of peroxyacetic acid and peroxyoctanoic acid is effective for killing on the surface of a fruit or vegetable pathogenic microorganism comprising *Escherichia coli* O157:H7, *Listeria monocytogenes*, *Salmonella javiana*, or mixture thereof.

40. (New) The method of claim 6, wherein the equilibrium mixture comprises at least about 1 part by weight of peroxyoctanoic acid for each about 4 parts of peroxyacetic acid.

41. (New) The method of claim 8, wherein the combination of peroxyacetic acid and peroxyoctanoic acid is effective for killing on the surface of a fruit or vegetable

pathogenic microorganism comprising *Escherichia coli* O157:H7, *Listeria monocytogenes*, *Salmonella javiana*, or mixture thereof.

42. (New) The method of claim 8, wherein the composition comprises at least about 1 part by weight of peroxyoctanoic acid for each about 4 parts of peroxyacetic acid.

CI 43. (New) The method of claim 31, wherein the combination of peroxyacetic acid and peroxyoctanoic acid is effective for killing on the surface of a fruit or vegetable pathogenic microorganism comprising *Escherichia coli* O157:H7, *Listeria monocytogenes*, *Salmonella javiana*, or mixture thereof.

44. (New) The method of claim 31, wherein the flume comprises at least about 1 part by weight of peroxyoctanoic acid for each about 4 parts of peroxyacetic acid.

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